

CLAIMS

[1] A camera terminal constituting an imaging zone adjusting apparatus that adjusts an imaging zone using multiple camera
5 terminals, comprising:

a camera that images a hypothetical imaging zone that is a hypothetical imaging zone obtained by changing the position of an imaging zone within a specific zone in a specific period of time;

an adjusting unit operable to adjust the position of the
10 hypothetical imaging zone by controlling said camera; and

a communication unit operable to send/receive hypothetical imaging zone information indicating the hypothetical imaging zone,

wherein said adjusting unit is operable to adjust the position of the hypothetical imaging zone to which the camera terminal
15 belongs based on the hypothetical imaging zone to which the camera terminal belongs provided with said adjusting unit and the hypothetical imaging zones of the other camera terminals indicated by the hypothetical imaging zone information received by said communication unit so that a combined zone of the hypothetical
20 imaging zones of said multiple camera terminals completely covers a specific imaging target zone.

[2] The camera terminal according to Claim 1,
wherein said camera repeatedly images said hypothetical
25 imaging zone.

[3] The camera terminal according to Claim 2,
wherein said adjusting unit is operable to adjust the position of the hypothetical imaging zone to which the camera terminal
30 belongs so that the overlapping zone quantity that is the quantity of a zone where the hypothetical imaging zone to which the camera terminal belongs and a hypothetical imaging zone adjacent to said

hypothetical imaging zone overlap converges on a target quantity that is a fixed quantity larger than 0.

[4] The camera terminal according to Claim 3,

5 wherein said adjusting unit is operable to repeat a step of selecting a hypothetical imaging zone adjacent to the hypothetical imaging zone to which the camera terminal belongs among the hypothetical zones of said multiple camera terminals, a step of calculating the overlapping zone difference quantity that is the
10 difference between the overlapping zone quantity of the selected hypothetical imaging zone and hypothetical imaging zone to which the camera terminal belongs and said target quantity, and a step of calculating the position of the hypothetical imaging zone to which the camera terminal belongs that leads said overlapping zone
15 difference quantity to 0, whereby the position of the hypothetical imaging zone to which the camera terminal belongs is adjusted for the position obtained by said repeated steps.

[5] The camera terminal according to Claim 4,

20 wherein said overlapping zone difference quantity is a quantity that is minimized when the overlapping zone quantity and said target quantity are equal.

[6] The camera terminal according to Claim 2,

25 wherein said camera comprises a unit operable to change the imaging cycle in which said hypothetical imaging zone is repeatedly imaged, and

said adjusting unit is further operable to adjust the position and imaging cycle of the hypothetical imaging zone to which the
30 camera terminal belongs so that the imaging cycle of the hypothetical imaging zone to which the camera terminal belongs and the imaging cycles of a hypothetical imaging zone adjacent to said

hypothetical imaging zone are nearly equal.

[7] The camera terminal according to Claim 2,
wherein said camera comprises a unit operable to change the
5 imaging cycle in which said hypothetical imaging zone is repeatedly
imaged, and

said adjusting unit is further operable to adjust the position
and imaging cycle of the hypothetical imaging zone to which the
camera terminal belongs so that the imaging cycle of the
10 hypothetical imaging zone to which the camera terminal belongs
becomes smaller.

[8] The camera terminal according to Claim 2,
wherein said imaging zone adjusting apparatus further
15 includes:
a merging unit operable to obtain images captured by the
cameras of said multiple camera terminals and merge them into a
spatially continued image; and
a display unit operable to display the merged image.

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[9] The camera terminal according to Claim 1,
wherein said adjusting unit is further operable to adjust the
position and aspect ratio of the hypothetical imaging zone to which
the camera terminal belongs so that the aspect ratio of the
25 hypothetical imaging zone to which the camera terminal belongs
becomes a specific target quantity.

[10] The camera terminal according to Claim 9,
wherein said aspect ratio target quantity is an aspect ratio
30 determined by the position of the imaging zone and the installation
points of the camera.

[11] An imaging zone adjusting apparatus that adjusts an imaging zone using multiple camera terminals, said apparatus comprising multiple camera terminals according to Claim 1.

5 [12] A sensor terminal constituting a detection zone adjusting apparatus that adjusts a detection zone using multiple sensor terminals, said apparatus comprising:

a sensor that detects physical quantities within a hypothetical detection zone that is a hypothetical detection zone obtained by
10 changing the position of a detection zone within a specific zone in a specific period of time;

an adjusting unit operable to adjust the position of said hypothetical detection zone by controlling said sensor; and

a communication unit operable to send/receive hypothetical
15 detection zone information indicating said hypothetical detection zone,

wherein said adjusting unit is operable to adjust the position of the hypothetical detection zone to which the sensor terminal belongs based on the hypothetical detection zone to which the
20 sensor terminal belongs provided with said adjusting unit and the hypothetical detection zones of the other sensor terminals indicated by the hypothetical detection zone information received by said communication unit so that a combined zone of the hypothetical detection zones of said multiple sensor terminals completely covers
25 a specific detection target zone.

[13] The sensor terminal according to Claim 12,
wherein said sensor repeatedly detects physical quantities within said hypothetical detection zone.

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[14] An imaging zone adjusting method in a camera terminal constituting an imaging zone adjusting apparatus that adjusts an

imaging zone using multiple camera terminals,

wherein said camera terminal includes a camera that images a hypothetical imaging zone that is a hypothetical imaging zone obtained by changing the position of an imaging zone within a specific zone in a specific period of time and a communication unit operable to send/receive hypothetical imaging zone information indicating said hypothetical imaging zone, and

said imaging zone adjusting method comprises a step of adjusting the position of the hypothetical imaging zone to which the camera terminal belongs based on the hypothetical imaging zone to which the camera terminal belongs and the hypothetical imaging zones of the other camera terminals indicated by the hypothetical imaging zone information received by said communication unit so that a combined zone of the hypothetical imaging zones of said multiple camera terminals completely covers a specific imaging target zone.

[15] A program for a camera terminal constituting an imaging zone adjusting apparatus that adjusts an imaging zone using multiple camera terminals, said program causing a computer to execute the step included in the imaging zone adjusting method according to Claim 14.